

IN THE CLAIMS:

Please cancel claims 17-18 without prejudice or disclaimer of the subject matter thereof.

The following is a complete listing of claims in this application.

1. (original) An opalescent glass ceramic, in particular an opalescent glass ceramic as a dental material or as an additive to or component of dental material, comprising at least the components SiO_2 , Al_2O_3 , P_2O_5 , Na_2O , K_2O , CaO and Me(IV)O_2 , characterized in that the opalescent ceramic is devoid of ZrO_2 and TiO_2 , that the glass ceramic has a Me(II)O content of less than 4% by weight and that the Me(IV)O_2 content is 0.5 to 3% by weight.

2. (original) The opalescent glass ceramic according to claim 1, characterized in that Me(IV)O_2 is composed of 0 - 1% by weight CeO_2 and 0 - 2.5% by weight SnO_2 .

3. (original) The opalescent glass ceramic according to claim 1, characterized in that the Me(II)O content is 2 - 3.5% by weight, in particular 2.5 - 3% by weight.

4. (currently amended) The opalescent glass ceramic according to ~~any one of the claims 1 to 3~~ claim 1, characterized in that the glass ceramic contains the following components:

Component	% by weight
SiO_2	55 - 62
Al_2O_3	13 - 17
B_2O_3	0 - 2
P_2O_5	1.5 - 3
Li_2O	0 - 2
Na_2O	7 - 12
K_2O	8 - 12
MgO	0 - 2
CaO	1 - 4
BaO	0 - 2

Tb ₂ O ₃	0 - 3
Me (IV) O ₂	0.5 - 3

the indicated amount of Me(IV)O₂ being composed of 0 - 1% by weight CeO₂ and 0 - 2.5% by weight SnO₂.

5. (currently amended) The opalescent glass ceramic according to ~~any one of the claims 1 to 3~~ claim 1, characterized in that the glass ceramic contains the following components:

Component	% by weight
SiO ₂	58 - 60
Al ₂ O ₃	14 - 15
P ₂ O ₅	2.3 - 2.6
Na ₂ O	9.5 - 10.5
K ₂ O	9 - 10
CaO	2.8 - 3.0
SnO ₂	1.3 - 1.6
CeO ₂	0.3 - 0.4
Tb ₂ O ₃	0 - 2.0

6. (currently amended) The opalescent glass ceramic according to ~~at least one of the preceding claims~~ claim 1, characterized in that CeO₂ and/or Tb₂O₃ are fused to obtain a fluorescent property.

7. (currently amended) The opalescent glass ceramic according to ~~at least one of the preceding claims~~ claim 1, characterized in that the glass ceramic has a thermal expansion coefficient (TEC) in the range of 9.0 - 13.5 x 10⁻⁶/K, in particular 10.5 - 12.0 x 10⁻⁶/K.

8. (currently amended) A method for producing an opalescent glass ceramic according to ~~any one of the claims 1 to 7~~ claim 1, in particular an opalescent glass ceramic as a dental material or as an additive to or component of dental material, comprising at least the components SiO₂, Al₂O₃, P₂O₅,

Na_2O , K_2O , CaO and Me(IV)O_2 , characterized in that the method comprises the following procedural steps:

- weighing in and mixing the components with a mixing ratio according to one of the claims 1 to 6;
- melting the mixture in a furnace;
- quenching the molten mass coming out of the furnace in a water bath and subsequent drying;
- grinding the frit thus obtained in a mill;
- tempering the frit;
- after drying, filling the frit in a mill and grinding the frit;
- sifting the ground frit through a sieve, the sieve opening forming the end.

9. (original) The method according to claim 8, characterized in that the tempering of the frit is carried out in the following manner:

- stacking the ground frits on quartz-coated fire-clay plates,
- placing the fire-proof plates in a furnace, e.g. an electric furnace, heated to a temperature T with $850^\circ\text{C} \leq T \leq 1000^\circ\text{C}$,
- removing the plates from the furnace after a time t with $30 \text{ min} \leq t \leq 60$,
- quenching the melted frit cakes in a water bath.

10. (currently amended) The method according to claim 8 ~~or 9~~, characterized in that the components are mixed in a gyro mixer.

11. (currently amended) The method according to ~~at least one of the claims 8 to 10~~ claim 8, characterized in that the

mixture is melted in a preferably gas-heated drip-feed crucible furnace.

12. (currently amended) The method according to ~~at least one of the claims 8 to 11~~ claim 8, characterized in that after drying, the frit is filled into a ball mill and ground with about 10,000 revolutions per minute.

13. (currently amended) The method according to ~~at least one of the claims 8 to 12~~ claim 8, characterized in that the ground frit is preferably sifted through a sieve having a mesh size M in the range of $80 \mu\text{m} \leq M \leq 120 \mu\text{m}$, preferably $M = 100 \mu\text{m}$.

14. (currently amended) The method according to ~~at least one of the claims 8 to 13~~ claim 8, characterized in that the fusing is produced by heating the granulated material to 870 to 970°C.

15. (currently amended) The method according to ~~at least one of the claims 8 to 14~~ claim 8, characterized in that the thermal expansion coefficient (TEC) is set to a value $9.0 \leq \text{TEC} \leq 13.5 \times 10^{-6}/\text{K}$ by the K_2O content.

16. (currently amended) The method according to ~~at least one of the claims 8 to 15~~ claim 8, characterized in that the baking temperature of the opalescent glass ceramic is controlled by the proportions of B_2O_3 , Li_2O and Na_2O and is preferably in the range of 870°C to 970°C.

Claims 17-18 (canceled).